

DEPARTMENT OF HUMAN RESOURCES

Study Guide

Maintenance Worker Series Written Examination Written Examination

- The Maintenance Worker Series exam is required for the following classifications: Maintenance Worker I, Maintenance Worker II, and Maintenance Worker III.
- This booklet contains SAMPLE QUESTIONS ONLY. Studying this booklet will not necessarily improve your exam score.

PURPOSE AND CONTENT OF THIS STUDY GUIDE

This guide was developed to help you prepare to take the written exam for the Maintenance Worker Series. It contains general exam-taking advice and also provides specific information related to the exam content. This information includes the subject areas covered by the exam, the kinds of questions to expect, strategies for approaching the questions, and sample questions. Though this information cannot guarantee a higher exam score, it can give you direction for your exam preparation that will assist you in doing your best.

PREPARING TO TAKE THE EXAM

Before the Day of the Exam

- Review this guide to get familiar with the content of the exam. Knowing about the topics and kinds of questions that will be in the exam will ensure that you will not be surprised by the content of the exam or the manner in which it is presented. This can improve your ability to demonstrate your job potential.
- Make sure that you know where the exam will be administered and all of the relevant details, such as where to park, where to report for the exam, and what identification is required.

On the Day of the Exam

- Make sure that you are well rested and have eaten. These things will help your concentration during the exam.
- Plan your day to allow plenty of time to get yourself prepared and get to the exam site. Allow enough time to cope with weather, traffic, parking, etc. Hurrying creates anxiety, so do not put yourself in the position of having to hurry.
- Listen carefully to all instructions from the exam administrator. Make sure that you understand the instructions and carry them out correctly. Ask questions at the proper time before the exam begins if you are unsure of any aspect of what you should do during the exam.

GENERAL EXAM TAKING TIPS

- Use your time carefully. The time limit should provide you with more than enough time if you move through the exam steadily and do not spend too much time on any one question.
- Read the questions and answer choices carefully. Read all of the answer choices before you select an answer.
- If you come to a question that is especially difficult, skip that question and come back to it later if you have time.
- Answer every question. Scores are based on the number of correct answers. You will
 receive no credit if you leave an answer space blank. It is to your advantage to use your
 best judgment to make a choice among the answer choices provided.

THE MAINTENANCE SERIES WRITTEN EXAM

The written exam for the Maintenance Series is based upon a job study that identified the most important knowledge, skills, and abilities required to perform the job successfully. These areas include:

- your knowledge of basic safety practices.
- your ability to interpret street maps and directions.
- your knowledge of concepts related to the performance of outdoor maintenance activities.

All of the exam questions are presented in a multiple-choice format. Each question is identified by a question number that is followed by a question statement. After the question statement, there are between two and four answer choices. You should read all of the answer choices and then choose the best answer. **Each question has only one correct answer.**

EXAM SECTION I: BASIC SAFETY

This exam section contains eighteen (18) questions related to performing physical tasks, safely working outdoors, and responding to basic safety concerns. A good strategy for answering questions in this section is to create a picture in your mind of the situation described in each question and its response options. This should help you to clarify what types of hazards might be associated with the situation and how they are affected by the different options.

Examples of these types of questions are shown below with each question followed by a brief explanation of the correct answer.

- 1. When lifting a heavy object, you should avoid doing which of the following?
 - A. Twisting or turning motions.
 - B. Lifting the object above your waist.
 - C. Holding the object close to your body.
 - D. Having your feet spaced widely apart.

Answer: The correct answer to sample question #1 is response option "A". Twisting or turning while lifting may cause injury to your lower back. All of the other response options are recommended techniques for safe lifting.

- 2. If you are working at a field location and must take equipment to a work site that is in an area without clear walkways, the best way to avoid injury is to:
 - A. place the equipment in containers with handles or shoulder straps.
 - B. wear loose clothing and footwear that has a large tread on the soles.
 - C. scan the area for uneven surfaces and other environmental hazards.
 - D. carry only one thing at a time and make multiple trips to the work site.

Answer: The correct answer to sample question #2 is response option "C". The greaexam risk of injury in an area that has uneven terrain is typically from trips or falls. Such a risk is best addressed by carefully assessing the area prior to moving about.

- 3. Which of the following is the best way to stay hydrated when you are working outdoors in hot and humid conditions?
 - A. Consume only beverages that are very cold.
 - B. Frequently consume small amounts of water.
 - C. Consume any kind of drink that has sugar in it.
 - D. On scheduled breaks, consume as much water as you can.

Answer: The correct answer to sample question #3 is response option "B". The safest way to stay hydrated is to frequently consume small amounts of water.

EXAM SECTION 2: FOLLOWING STREET MAPS AND DIRECTIONS

This exam section contains fifteen (15) questions that evaluate your understanding of basic directions such as north, south, east, and west, and how to best move from one destination to another. Some questions will involve looking at a map to determine how to arrive at a certain destination. Other questions will provide written descriptions and ask you to make decisions based upon them.

There are several strategies for approaching these types of questions:

- Make sure that you understand the starting direction (north, south, east, or west) and the direction of travel and then create a visual image in your mind. It is much easier to avoid mistakes when you have a visual image. When referring to a map or diagram, first make sure that you understand the orientation of the picture, such as which direction is north or what is considered the "top" of the picture.
- Double check your accuracy when instructed to make a left or right turn. How often have you heard someone say "your other left" or "your other right" when someone has made a mistake in this area. Though we all know our left from right, it is fairly common to make a mistake when our minds are focused on other parts of the directions.
- When determining the best route of travel, consider anything that might make travel more difficult or less direct, such as backtracking or making many stops or turns.

Examples of the types of questions in this exam section are shown below with each question followed by an explanation of the correct answer.

- 4. You are traveling east and make a right-hand turn. In which direction are you now traveling?
 - A. North.
 - B. South.

Answer: The correct answer to sample question #4 is response option "B". To correctly answer the question, you must understand the relative positioning of north, south, east, and west. This positioning is best depicted by the classic "compass rose" shown below:

Based on this depiction of the four directions, it can be seen that if you are traveling east and then turn right, or clockwise on the diagram, you would then be traveling south, making option "B" the correct answer.

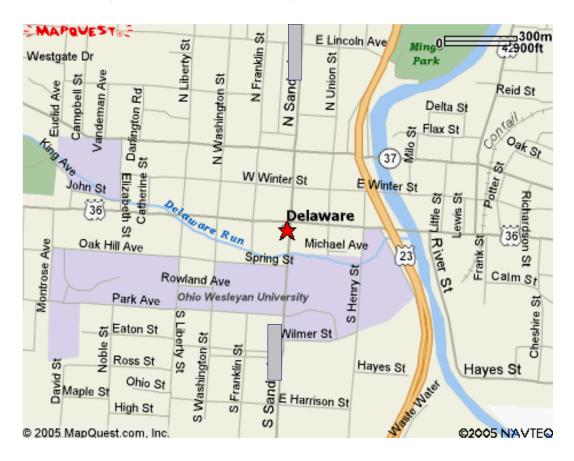
- 5. You are traveling on Magnolia Street on your way to a work site. You turn right onto Cypress Avenue and then left on Hibiscus Drive and left into the work site driveway. To return the same way, you should turn:
 - A. right out of the driveway onto Hibiscus Drive, left onto Cypress Avenue, and then right onto Magnolia Street.
 - B. right out of the driveway onto Hibiscus Drive, right onto Cypress Avenue, and then left on Magnolia Street.
 - C. right out of the driveway onto Hibiscus Drive, left onto Cypress Avenue, and then left onto Magnolia Street.
 - D. left out of the driveway onto Hibiscus Drive, right onto Cypress Avenue, and then right onto Magnolia Street.

Answer: To answer this question, it is helpful to create a mental picture of what is described. In this case, the image would look something like the diagram below.

Magnolia St.

By reversing the starting point from Magnolia Street to the Hibiscus Drive destination and then backtracking, it is clear that the correct answer to the question is response option "B": a right turn out of the driveway onto Hibiscus Drive, right onto Cypress Avenue, and then left on Magnolia Street. While it is possible to reach this conclusion by simply using the opposite directions, the likelihood of a correct response is increased by using a graphic depiction of the activity.

Use the map below to answer the question that follows:



N W +E S

- 6. You are on the corner of High Street and Noble Street. Which of the following is the most direct route to Elizabeth Street?
 - A. North on Noble Street, then East on Delaware.
 - B. East on High Street, North on Liberty, and West on Delaware.
 - C. West on High Street, North on Washington Street, and West on Delaware.
 - D. North on Noble Street, West on Eaton Street, North on Liberty Street, and West on Winter Street.

Answer: To answer this question, you should visually follow the route suggested by each response option. You might even find that pointing in a tracing motion with your pencil will help you focus more clearly on the route. The route suggested by response option "B" is the choice that accurately follows the map with the fewest turns and least amount of travel distance, making option "B" the correct answer to the question.

EXAM SECTION 3: OUTDOOR MAINTENANCE

This exam section contains sixteen (16) questions that evaluate your knowledge of basic tools and concepts related to outdoor construction and grounds maintenance tasks. The best strategy for approaching questions in this area is to read each question and all of the response options and then re-read the question to make sure that you understand precisely what is being asked. Then, create a visual image of the situation presented and how each response option affects it. You can then eliminate the least reasonable options and select the one best option.

Examples of the types of questions in this exam section are shown below with each question followed by a brief explanation of the correct answer.

- 7. The shovel shown below would be most appropriate for which of the following tasks?
 - A. Planting a tree.
 - B. Digging a trench.
 - C. Breaking up dry, compacted soil.
 - D. Moving dirt from a pile into a truck.



Answer: The correct answer to the question is response option "D". The shovel shown in the picture is a square point shovel. This type of shovel is used for transferring materials from one place to another. The activities listed in the other response options are best achieved using either a round point shovel or a pick axe.

- 8. When using a hacksaw, you should apply pressure during:
 - A. the forward stroke.
 - B. the return stroke.
 - C. both the forward and return strokes.

Answer: The correct answer to the question is response option "A". The forward stroke is the cutting stroke when using a hacksaw and is when the pressure should be applied.

- 9. You are preparing to place fertilizer a grass area of a park that is 10,000 square feet. The fertilizer that you will use comes in twenty-five (25) pound bags. If each bag indicates that it can cover 250 square feet, how many bags of fertilizer will you need to fertilize the entire area?
 - A. 40 bags.
 - B. 46 bags.
 - C. 50 bags.
 - D. 54 bags.

Answer: The correct answer to the question is response option "A". This answer is achieved by taking the 10,000 square foot area and dividing it by the area covered by one bag which is 250 feet $(10,000 \div 250 = 40)$.

When answering questions that involve arithmetic, always check your work to be sure that you have not made a careless mistake. For example, be sure that you have put a decimal point in the correct place.

ADDITIONAL ASSISTANCE

If you feel that you would benefit from more practice, your local library or relevant internet web sites may have reference materials that can be helpful. This is true for all of the subject areas covered by the Maintenance Work Exam Series written exam.